CK-12 Foundation
CK-12 Middle School Math, Grades 6-8

Degree of Evidence regarding the Standards for Mathematical Practice:

Minimal Evidence

Summary of evidence:

1. **Make sense of problems and persevere in solving them**. There is minimal evidence of this practice in the sampled materials. The lesson structure—provide rule/procedure, guided practice with rule/procedure, then independently practice rule/procedure—was cited as a hindrance to this mathematical practice. The lessons involve very few real-world contexts, and true problem solving is almost non-existent.
2. **Reason abstractly and quantitatively**. This practice is especially underdeveloped in the series. The sampled sections provide few application problems and minimal opportunities for sense making by the students. Reviewers noted that, without exception, students are told exactly how to do each exercise; for example, one proportional reasoning scenario is presented in a real-world context, but the actual proportion is given to the students, so they do not need to read the problem or make sense of the scenario in order to answer the question.
3. **Construct viable arguments and critique the reasoning of others**. This practice is poorly developed in the sampled materials. Reviewers found no evidence in the sampled chapters of students being asked to make conjectures, provide analysis, or communicate their ideas to others.
4. **Model with mathematics**. There is minimal evidence of this practice in the series. There is no evidence in the sampled sections of students using models themselves. A few models are provided, some of which contain mathematical errors.
5. **Use appropriate tools strategically.** There is minimal evidence of this practice in the sampled materials. The resources primarily emphasize specific procedures, and students are not asked to use tools other than a few external websites. Reviewers noted that the resource included links to other websites, yet there is no guidance provided as to how those links should be used by the students. There are no references in the sampled sections to the use of graphing calculators or to making comparisons among different types of tools.
6. **Attend to precision.** This practice is especially weak in the sampled materials. Reviewers noted numerous mathematical errors and incorrect use of key vocabulary. Even in sections where presented examples are precise and correct, there is no requirement that students communicate to others with precision or about precision.
7. **Look for and make use of structure**. There is no evidence of this practice in the sampled sections of this series.
8. **Look for and express regularity in repeated reasoning.** There is minimal evidence of this practice in the sampled sections of this series. Students are not asked to evaluate their progress or the reasonableness of their answers. They are rarely asked to make generalizations.